DOVER MUNICIPAL WELL 4

NEW JERSEY

EPA ID# NJD980654131

EPA REGION 2
CONGRESSIONAL DIST. 11
Morris County
Dover

Site Description

The Dover Municipal Well No. 4 site is located in the Town of Dover, Morris County, New Jersey. Dover Municipal Well No. 4 is located approximately 1.5 miles east of three potable water production wells which serve a community of approximately 22,000 people. The Dover Water Commission owns and operates this municipal well field. Dover Municipal Well No. 4 was one of the town's primary drinking water supply wells until it was taken out of service in 1980 because of groundwater contaminated with halogenated organic solvents. Since that time, standby well No. 3 has been used in place of well No. 4 as a potable water production well.

Site Responsibility: This site is being addressed through Federal actions.

NPL LISTING HISTORY
Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants

Halogenated organic solvents including trichloroethane, tetrachloroethylene, and dichloroethylene have been detected in the groundwater. The contaminated groundwater could pose a health hazard to individuals if it were ingested.

Cleanup Approach

The remediation of the site will consist of at least two operable units: one which will address the identified groundwater contamination and one or more which will address additional groundwater contamination at the site and the potential source(s) of the contamination.

Response Action Status

Entire Site: In conjunction with the New Jersey Department of Environmental Protection, several parties potentially responsible for the contamination conducted studies at their own facilities to determine if they were sources of the contamination of Dover Municipal Well No. 4. While the studies identified contamination at the individual properties, they also showed that the facilities were not the source of the contamination at Well No. 4. The State's remedial investigation and feasibility study (RI/FS) at the site to evaluate the nature and extent of the contamination was completed in 1992. The remedy selected in the Record of Decision (ROD), signed in 1992, for the first operable unit includes: (1) extraction of contaminated groundwater by pumping Dover Municipal Well No. 4 and an estimated two new extraction wells in order to restore the aquifer to drinking water standards; (2) treatment of extracted groundwater to levels attaining drinking water standards; (3) discharge of the treated groundwater to the public water supply system to the extent practicable, with reinjection of any surplus quantity; and (4) appropriate environmental monitoring to ensure the effectiveness of the remedy. The ROD also called for a subsequent RI/FS to investigate the overall extent of the groundwater contamination, identify and investigate specific sources of the contamination, and to develop and evaluate remedial alternatives, as appropriate. Investigation activities that were conducted in the summer and fall of 1998 did not identify sources of the groundwater contamination. A subsequent field investigation was initiated in the spring of 2000, as part of pre-remedial design activities. The field activities consisted of the installation and sampling of additional monitoring wells and the use of a groundwater flow model to assist EPA with the design of an appropriate extraction and treatment system. Ground water modeling showed that the extraction and treatment remedy would not work unless the source of the contamination could be located and controlled. This has delayed the ground water remedial design. EPA has located a source of the groundwater contamination plume and will characterize its nature and extent during the RI/FS. EPA will then develop remedial alternatives. If a source control or cleanup remedy is selected, EPA will need to perform a remedial design and remedial action.

Cleanup Progress

After adding the Dover Municipal Well No. 4 site to the National Priorities List, EPA performed a preliminary evaluation and determined that the site does not pose an immediate threat to the public, as long as the well is not used for potable purposes. Further investigation of a source of the contamination, along with the design of the remedy for the first operable unit, are underway.